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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/509,643	07/24/2000	Hermann Link	5509	7739

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EXAMINER

MILLER, BRANDON J

ART UNIT	PAPER NUMBER
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2683

DATE MAILED: 02/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/509,643	LINK ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Brandon J Miller	2683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10/15/04.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 10-16, 18-21 and 23-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 16, 18-21 and 23-25 is/are allowed.
- 6) ☒ Claim(s) 10-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413) Paper No(s) <u>12/15/04</u> . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>12/15/04</u> . | 6) <input type="checkbox"/> Other:   |

## **DETAILED ACTION**

### ***Response***

#### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/15/04 has been entered.

#### ***Allowable Subject Matter***

Claims 16, 18-21, and 23-25 contain allowable subject matter.

The following is an examiner's statement of reasons for allowable subject matter:

Regarding claim 16 the combination of Takayama in view of Baker and Kishigami does not teach or fairly suggest providing a selection signal indicative of a selected control signal, wherein a first control signal is indicative of the amount of gain applied by first automatic gain control circuitry of the first radio receiver to create a first data signal, and the second control signal is indicative of the amount of gain applied by second automatic gain control circuitry of the second radio receiver to create the second data signal. Regarding claim 20 the combination of Takayama in view of Baker does not teach or fairly suggest a uniquely associated receiver output signal and a uniquely associated receiver control signal indicative of the amount of gain applied by an associated radio receiver to create a uniquely associated receiver output signal and selecting a receiver based upon an output signal indicative of automatic gain correction applied.

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The allowable subject matter of claims 18-19, 21, and 23-25 are based upon their dependence of independent claims 16 and 20.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takayama in view of Baker and Lawrence.

Regarding claim 10 Takayama teaches a method for selecting one of several receivers of a diversity receiving system (see col. 10, lines 45-53). Takayama does not teach comparing the levels of control signals of an automatic gain control of the receivers, and selecting a receiver whose control signal has the lowest level. Baker teaches comparing the levels of control signals of an automatic gain control of diversity receivers (see 1<sup>st</sup> paragraph, lines 10-15, 23-34, & 42-45, 2<sup>nd</sup> paragraph, lines 46-58 & 73-81). Lawrence teaches detecting the levels of control signals of an automatic gain control of receivers and sending a mute signal to a receiver whose control signal has the lowest level (see col. 2, lines 24-28 & 55-61). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the invention adapt to include comparing the levels of control signals of an automatic gain control of the receivers, and selecting a receiver whose control signal has the lowest level because this would allow for selection of a receiver with the highest quality signal.

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Regarding claim 11 Takayama, Baker, and Lawrence teach a device as recited in claim 10 except for a switchover to another receiver that occurs only if the level of its control signal lies below the level of the other control signal by a specifiable minimum. Takayama does teach a switchover from one receiver to another receiver (see col. 2, lines 15-22). Lawrence does teach sending a muting signal only if the level of its control signal lies below the level of the other control signal by a specifiable level (see col. 2, lines 24-28 & 55-61). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include a switchover to another receiver that occurs only if the level of its control signal lies below the level of the other control signal by a specifiable minimum because this would allow for selection of a receiver with the highest quality signal.

Claims 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takayama in view of Baker, Lawrence, and Kishigami.

Regarding claim 12 Takayama, Baker, and Lawrence teach a device as recited in claim 10 except for a mobile diversity receiving system. Kishigami teaches a mobile diversity receiving system (see col. 1, lines 9-10). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the invention adapt to include a mobile diversity receiving system because this would allow for improved reception of signals in mobile devices.

Regarding claim 13 Kishigami teaches a video receiver (see col. 1, lines 22-24).

Regarding claim 14 Takayama, Baker, Lawrence, and Kishigami teach a device as recited in claim 13 except for switchover from the selection of a first of the receivers to a second of the receivers occurs in response to selection of the receiver whose control signal has the lowest level

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and the switchover is performed between transmission of data blocks. Takayama does teach a switchover from a selection of a first of the receivers to a second of the receivers (see col. 2, lines 15-22 and col. 5, lines 28-31). Lawrence does teach sending a mute signal to a receiver whose control signal has the lowest level (see col. 2, lines 24-28 & 55-61). Kishigami does teach transmission of data blocks (see col. 9, lines 45-48). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include a switchover from the selection of a first of the receivers to a second of the receivers occurs in response to selection of the receiver whose control signal has the lowest level and the switchover is performed between transmission of data blocks because this would allow for improved reception of signals in mobile devices.

Regarding claim 15 Kishigami teaches line synchronization (see col. 2, lines 7-12).

### ***Response to Arguments***

Applicant's arguments with respect to claims 10-15 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Andoh U.S Patent No. 5,241,701 discloses an antenna selecting diversity receiving apparatus.

Lindenmeier U.S Patent No. 6,169,888 discloses a receiving antenna scanning diversity system with controllable switching.

Cvetkovic U.S. Patent No. 6,141,536 discloses a diversity radio system with RDS.

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Igarashi U.S. Patent No. 5,940,143 discloses a high-definition television signal receiving apparatus and gain control circuit thereof.

Takai U.S. Patent No. 6,032,031 discloses a receiver for suppressing intermodulation.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandon J Miller whose telephone number is 703-305-4222. The examiner can normally be reached on Mon.-Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 703-308-5318. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



WILLIAM TROST  
SUPERVISORY PATENT EXAMINER  
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January 4, 2005